The New Horizon

NEW WIDE BAND ALL MODE RECEIVER

AR5000

RS-232C Command List



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(DELIMITTER···[CR][LF])

	REQUEST CON	MAND	SETTING	. NOTE	
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting [CR+LF]	NOIL	
-Rx-FREQ	Vn RF…	w w	Vxnnnnnnnnn (Hz) ···Vx=VA/VB/VC/VD/VE Vxnn . nn (MHz) RFnnnnnnnnn (Hz) RFnn . nn (MHz)	-kHz indicated below 30MHzFREQSETTING	
·	RX [CR]	R R R R R	The present receiving mode is shown. MS MXnnn MPn GAn REnnnnnnnnn STnnnnnn AUn MDn ATn TMxxxxxxxx SM MXnnn MPn GAn REnnnnnnnnnn STnnnnnn AUn MDn ATn TMxxxxxxxx MR MXnnn MPn GAn REnnnnnnnnnn STnnnnnn AUn MDn ATn TMxxxxxxxx SSn REnnnnnnnnnn STnnnnnn AUn MDn ATn TTxxxxxxxx VS Vn REnnnnnnnnnn STnnnnnn AUn MDn ATn TTxxxxxxxx Vn REnnnnnnnnnn STnnnnnn AUn MDn ATn TTxxxxxxxx Vn REnnnnnnnnnn STnnnnnn AUn MDn ATn (Vn···n=A/B/C/D/E)	-M-SCAN MODE -MSEL MODE -MEM MANUAL MODE -SEARCH MODE -VFO-SEARCH MODE -VFO-MODE	
	MSn [CR] SM [CR] MRmnn [CR] SSnn [CR] VSx [CR] Vx [CR]	W W W	m=0-9/nn=00-99···DEFULT=CURRENT MEM CH # n=00-19···DEFULT=CURRENT SEARCH-BANK x=A,B,C,D,E···DEFULT=CURRENT VFO	-M-SCAN MODE -MSEL MODE -MEM MANUAL MODE -SEARCH MODE -VFO-SEARCH MODE -VFO-MODE	

-AGC-LEVEL	LM···	R	LMnn···nn=00-FF(AGC-LEVEL is transmitted(256 steps). SQ-ON) LM%nn···nn=00-FF(AGC-LEVEL is transmitted(256 steps). SQ-OFF)	→When SQ is open. ←When SQ is close(w/%)
-AGC-LEVEL	LC···	w	LCn··· AGC-LEVEL SEND=OFF···n=0 AGC-LEVEL SEND=ON···n=1	-n=I -AGC-LEVEL is transmitted when SQ-ON.
	LC···	R	LCnn···nn=00-FF(AGC-LEVEL is transmitted(256 steps). SQ-ON) LCnn RFnnnnnnnnn	-BANK#(MXn/SRn)

RS-232C COMMAND LIST

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ITEM	REQU	EST COM	MAND	SETTING	NOTE
I I EM	CMD/I	HÉADER	R/W	DELIMITTER is added after setting[CR+LF]	NOTE
-∆(IEH)			W	UP···FREQ or CH-UP	
-∇(IFH)			W	DOWN···FREQ or CH-DOWN	
-EXIT	EX	[CR]	W	EX···OFF RS-232C	
-POWER OFF	QP	[CR]	w	QPPOWER OFF	
-VERSION INFO	VR		R	VER-nnVERSION INFORMATION	-EEPROM ADDRESS=0EFF0-0EFF1nn.nn
-X	х		w	X···POWER-ON	-With either key, turn on.
-REMOTE	RQ		w	RQnnn···nnn=0-255	
SQ-DATA	RQ	[CR]	R	RQ nnn or RQ+nnn(+···SQ-ON)	
γL	٧١		w	VLnnn···nnn=0-255	
VL [CR]	٧L	[CR]	R	VLnnn	
-CW-PITCH	CW		w	CWn···n=0-7 400Hz···n=0 500···n=1 600···n=2 700···n=3 800···n=4 900···n=5 1000···n=6 1100···n=7	
	CW	[CR]	R	CWn	

(DELIMITTER...[CR][LF])

	REQUES	т сомі	MAND	SETTING	NOTE
ITEM	CMD/HEA	ADER	R/W	DELIMITTER is added after setting[CR•LF]	NOTE
-CYBER-SCAN ON/OFF	DS···		w	DSn··· CYBER-SCAN OFF···n=0 CYBER-SCAN ON···n=1	
	DS [CR]	R	DSn	
-AUTO ON/OFF	AU		w	AUn AUTO-OFF···n=0 AUTO-ON···n=I	- The following item is set up automatically when AUTO-ON. STEP,MODE,BW,LPF,HPF,DE-ENPHASIS
	AU [CR]	R	AUn	
-MODE	MD···		w	MDn FM···n=0 AM···n={ LSB···n=2 USB···n=3 CW···n=4	-LPF, HPF, DE-EMPHASIS matched to BW is set up automaticallyAUTO-MODE is cleared automaticallyAGC-CONTROL is set up automatically.
	MD [CR]	R	AUn MDn	
-STEP-FREQ	ST···		w	STnnnnnn /+ (Hz)···[+]==>STEP-ADJ ON STnn.nn/+ (KHz)···[+]==>STEP-ADJ ON ST+···[+]==>STEP-ADJ ON/OFF	-AUTO-MODE is cleared automatically. -STP-ADJ ON…[+]
	ST [CR]	R	STnnnnnx(Hz)···X=+ (STEP-ADJ ON)	

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RS-232C COMMAND LIST

	REQUEST COM	MAND	SETTING	
ITEM	CMD/HEADER		DELIMITTER is added after setting[CR+LF]	NOTE
-STEP-ADJ	SH···	w	SHnnnnnn(Hz)···nn···n=0.00==>STEP-ADJ OFF SHnn.nn(KHz) SH+···[+]==>STEP-ADJ ON/OFF	-AUTO-MODE is added after settingSTP-ADJ ON…[+]
_	SH [CR]	R	SHnnnnnx(Hz)	
-SUB—STEP	SJ···	w	SJn···n=0-A MAIN···n=0 x 10···n=[100 Hz···n=2 500···n=3 1 KHz···n=4 5 KHz···n=5 10 KHz···n=6 50 KHZ···n=7 100 KHz···n=8 500 KHz···n=9 1000 KHz···n=A	
	SJ [CR]	R	SJn	
-ATT	AT···	w	ATn ATT 0dB···n=0(AUTO-ATT=OFF) ATT 10dB···n=1(//) ATT 20dB···n=2(//) ATT AUTO···n=F(AUTO-ATT=ON)	0dB/10dB/20dB···RX=0.005-230.0M 0dB/10dB···RX=230M-1000.0M 0dB···RX=1000M-2600M
	AT··· [CR]	R	ATOn···n=Oorlor2···AUTO-ATT=OFF ATIn···n=Oorlor2···AUTO-ATT=ON	

(DELIMITTER...[CR][LF])

	REQUEST COM	IMAND	SETTING	NOTE
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR+LF]	NOTE
-ANTENNA	AN	w	ANn···n=0-4(0=AUTO)	
	AN [CR]	R	ANn or AND n···AUTO-ANT==>ANO n	
-BAND WIDTH	BW··· BW [CR]	w	BWn 0.5 K···n=0 3 K···n=1 6 K···n=2 15 K···n=3 40 K···n=4 110 k···n=5 220 k···n=6	-AUTO-MODE is cleared automaticallyLPF,HPF,DE-EMPHASIS matched to MODE is set up automatically.
		R	BWn	
-LPF	LP··· LP [CR]	w	LPn 3 K···n=0 4 K···n=1 6 K···n=2 12 K···n=3	-AUTO-MODE is cleared automaticallySet up automatically by MODE & BW setting.
		R	LPn	
-HPF	HP··· HP [CR]	w	HPn 0.05 K···n=0 0.2 K···n=1 0.3 K···n=2 0.4 K···n=3	-AUTO-MODE is cleared automaticallySet up automatically by MODE & BW setting
		R	HPn	

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(DELIMITTER...[CR][LF])

Tri.	REQUEST COM	MAND	SETTING	
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR+LF]	NOTE
-DE-ENPHASIS	EN··· EN [CR]	w	ENn 25 us···n=0 50 ···n=1 75 ···n=2 750 ···n=3 THRU ···n=4	-AUTO-MODE is cleared automaticallySet up automatically by MODE & BW setting
		R	ENn	
-AGC CONTROL	AC··· AC [CR]	w	ACn FAST···n=0 MIDDLE···n=1 SLOW···n=2 OFF···n=F	-Automatic setting when AUTO-MODE.
		R	ACn	
-EEPROM -BANK SELECT	BN··· BN [CR]	w	BNn BANK-0···n=0 BANK-I···n=I	-When BANK is changed, system is initialized
		R	BNn	

(DELIMITTER···[CR][LF])

	REQUEST CO	MMAND	SETTING	NOTE
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR·LF]	NOTE
-CTCSS-FREQ	CN··· CN [CR]	w	CNnn···nn=06-37(BINARY) CTCSS OFF···nn=00 CTCSS ON WITH SEARCH···nn=01	
		R	CNnn···nn=00==>CTCSS-0FF/nn=01==>CTCSS-0FF	
-DTMF ON/OFF	QM··· QM [CR]	w	QMn DTMF OFF···n=0 DTMF ON···n=I	-DTMF data is transmitted one after another.
		R	QMn	
-TONE	LS···	w	LSnnn···nnn=0-255 (000=OFF)	
ELIMINATE FREQ	LS [CR]	R	LSnnn or LS+nnn(+···MUTE-ON)	
-SCRAMBLE DATA	SC··· SC [CR]	w	SCnnn···nnn=000-127(BINARY) DE-SCRAMBLE OFF···nnn=000 DE-SCRAMBLE ON···nnn=1-127	
		R	SCnnn	
-EXIT-IF	AI··· AI [CR]	,w	Aln EXIT-IF OFF···n=0 EXIT-IF ON···n=1 EXIT-IF 2 ON···n=2	
		R	Ain	

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RS-232C COMMAND LIST

	UMMAND LIST		(DELIMITTER····[CR][LF])	···
ITEM	REQUEST COM	MAND	SETTING	MOTE
I I EIWI	CMD/HEADER	R/W	DELIMITTER is added after setting[CR+LF]	NOTE
-MANUAL -TUNE or AUTO-TUNE	MT··· MT [CR]	w	MTn··· MANUAL-TUNE OFF···n=0 (AUTO-TUNE) MANUAL-TUNE ON···n=I	
AUTO-TONE		R	MTn TUnnn	-MANU-TUNE
-TUNE SELECT	TU··· TU [CR]	W	TUnnnnnn=000-255	
		R	TUnnn	
-VFO LEVEL-SQ	DB··· DB [CR]	w	DBnnn···nnn=000-255 L-SQ OFF···nnn=000	
		R	DB nnn or DB+nnn(+…CURRENT AGC-LEVEL ≥n)	
-VFO VOICE-LEVEL	DA··· DA [CR]	w	DAnnn VOICE OFF···nnn=000	
		R	DA nnn or DA+nnn(+CURRENT VOICE-LEVEL≥n)	
-VFO DELAY -TIME	DD··· DD [CR]	w	DDnn···nn=0.0-9.9(sec)···No need for decimal point DELAY OFF···nn=00	
		R	DDn.n	

(DELIMITTER...[CR][LF])

	REQUEST COM	MAND	SETTING	NOTE
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR+LF]	
-SEARCH SETTING	SE···	w	SEnn···nn=00-19(nn=BANK #) SLnnnnnnnnnnn(START-FREQ) SUnnnnnnnnnn(STOP-FREQ) AUn STnnnnnn/SHnnnnn····Set up if necessary. MDn,BWn,LPn,HPn,ENn····Set up if necessary. ATn,AHn,ACn····Set up if necessary. TTxxxxxxxxx(TiTLE)····Set up if necessary.	-Divided with SP(space). -LC-CMD···RESET ◎
	тт	w	TTxxxxxxxxv···(X=20-5F···ASCII-CODE)	-SP is effective as BLANK.
-SEARCH LISTING	SRnn	R	SRnn···n=00-19(nn=BANK #) SRnn SLnnnnnnnnn SUnnnnnnnnn STnnnnn AUn MDn ATn TTxxxxxxxx SR%···ALL-BANK	
-DELETE SEARCH WITH PASS-FREQ	QS	w	QSnn···nn=00-19 or BLANK(nn=BANK #)	
-SEARCH-LINK GROUP #	GS···	w	GSn···n=0-9	
	GS [CR] GS%% [CR]		GSn SDn n SB+n SA+nnn SPnn ASn BQn BS n n···n n···n n···n n(n=0-9 or -) GS%%···l0 groups from the next is indicated.	-BANK #···DD-19(TOTAL 20-BANKS)
-search-link on/off	BQ BQ [CR]	w	BQn LINK OFF···n=0 LINK ON···n=1	
		R	BQn	

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RS-232C COMMAND LIST

NO 2320 COMMAND EIGT			(DECIMITIEN[CN][EF])	
ITCM	REQUEST CON	MAND	SETTING	
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR+LF]	NOTE
-SEARCH-LINK BANK # SETTING	BS··· BS [CR]	w	BSnn···nn=00-19(nn=BANK #) or %%(RESET CURRENT-BANK #) BS %% nn nn···	
	B3 [CK]	R	BS n n···n n···n n···n n(n=0-9 or -)	-BANK #00-19(TOTAL 20-BANKS)
-AUTO-STORE On/OFF	AS··· AS [CR]	w	ASn AUTO-STORE OFF···n=0 AUTO-STORE ON···n=I (BANK #=0) AUTO-STORE ON & DELETE MEN···n=2(BANK #=0)	
		R	ASn···n=0 or I	
-LEVEL-SCAN	SB··· SB [CR]	w	SBnnnnnn=000-255 L-SQ OFFn=000	
		R	SB nnn or SB+nnn(+···CURRENT AGC-LEVEL≥n)	
-VÒICE-SCAN	SA··· SA [CR]	w	SAnnn···nn=000-255 VOICE OFF···nnn=000	
		R	SA nnn or SA+nnn(+CURRENT VOICE-LEVEL≥nnn)	
-SEARCH DELAY- TIME SETTING	SD··· SD [CR]	w	SDnn···nn=0.0-9.9(sec) or FF(HOLD)···No need for decimal point DELAY OFF···nn=00 HOLD···nn=FF	
		R	SDn.n	

(DELIMITTER...[CR][LF])

	REQUEST COM	MAND	SETTING	NOTE
ITÉM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR+LF]	
-SEARCH PAUSE-	SP	w	SPnn···nn=00-60 (sec)···00=PAUSE-OFF	
TIME SETTING	SP [CR]	R	Spn	
-START SEARCH	ss	w	SSnn···nn=00-19 or BLANK(nn=BANK #)	
-START VFO SEARCH	VS [CR]	w	VSx···x=A,B,C,D,E DEFULT=CURRENT VFO	
-PASS-FREQ SETTING	PS	w	PSnnnnnnnn (Hz) PSnn.nn (MHz)	-Set up present BANK
-PASS-FREQ SETTING	PW	w	PW···Present receiving FREQ is set up as PASS-FREQ.	
-PASS-FREQ DELETE	PD	w	PDnnmm···nn=00-20(BANK #) mm=00-99(mm=PASS-CH #) PD%%nn···nn=00-20(CURRENT BANK or nn BANK)	-nn=20···VFO
-PASS-FREQ LISTING	PR	R	PRnn···nn=00-20(nn=BANK # or VFO) PRnn mm nnnnnnnnn PRV mm nnnnnnnnn	-nn=20···VFO

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RS-232C COMMAND LIST

ITEM	REQUEST COMMAND		SETTING	
	CMD/HEADER	R/W	DELIMITTER is added after setting[CR-LF]	NOTE
-MEM SETTING	мх	w	MXnmm···n=0-9(BANK #) mm=00-99(mm=CH #)	-Divided with SP(space).
			RFnnnnnnnnn(Hz) or RFnn.nn	-MEM FREQ SETTING
			AUn	-LC-CMD····RESET ◎
			STnnnnnn/SHnnnnnn···Set up if necessary.	
			MDn,BWn,LPn,HPn,ENn,MPn…Set up if necessary.	
	1		ATn,AHn,ACn,Set up if necessary.	
			TMxxxxxxxx(TITLE)Set up if necessary.	
	TM···	w	TMxxxxxxxx ··· (X=20-5F···ASCII-CODE)	-SP is effective as BLANK.
-MEM LIST	ма	R	MAnn=0-9(n=BANK # & CH # =00) LIST of 10 CH	
			n···DEFULT==>CURRENT BANK & CH··· LIST of 10 CH	
			MXnnn MPn GAn RFnnnnnnnnn STnnnnnn AUn MDn ATn TMxxxxxxxx	
-MEM-PASS	MP···	w	MPn	-When setting of MEM-DATA or Memory
ON/OFF			PASS OFF···n=0	recall
	1		PASS ON···n=1	
	MP···	w	MP%%···PASS-OFF of ALL-MEM(1000-CH)	
	IVII LONG	R	MPn	
-MEM-SEL	GA···	w	GAn	-When setting of MEM-DATA or Memory
ON/OFF	l		SELECT OFF···n=0	recall
		j	SELECT ON···n=1	1
	GA···	W	GA%%···SELECT OFF of ALL-MEM	
	an [on]	R	GAn	
M-SEL LISTING	GR···	w	GRnn MXnmm RFnnnnnnnn TMxxxxxxxx	

(DELIMITTER···[CR][LF])

	REQUEST COMMAND		SETTING	NOTE
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR+LF]	
-MEM-DEL ON/OFF	мQ…	w	MQ···DELETE CURRENT MEM # MQnn···DELETE SETTING CH #(n=00-99) MQ%%n···DELETE ALL-MEM(CURRENT BANK or n BANK)	
-MEM-LINK	GM···	W	GWn···n=0−9	
GROUP #	GM [CR]	R	GMn XDn.n XB+n XA+nnn XPnn XMn MLn BM n n n n n n n n n n(n=0-9 or -) GM%%…List of 10 groups	
-MEM-LINK ON/OFF	ML···	w	MLn LINK OFF···n=0 LINK ON···n=1	
	ML [CR]	R	MLn	
-MEM-SCAN LINK BANK # SETTING	вм…	w	BMn···n=0-9(n=BANK #) or %%(RESET CURRENT-BANK #) BM %% n n	
	BM [CR]	R	BM n n···n(n=0-9)	
-MODE-SCAN ON/OFF	хм…	w	XMn···0-7&F FM···n=0 AM···n=1 LSB···n=2 USB···n=3 CW···n=4 ALL···n=F(ALL-MODE)	
	XM [CR]	R	XMn	

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ITEM	REQUEST COMMAND		SETTING	
	CMD/HEADER R/W	R/W	DELIMITTER is added after setting[CR-LF]	NOTE
-LEVEL-SCAN	XB··· XB [CR]	w	XBnnn···nnn=000-255 L-SQ OFF···nnn=000	
,	XB [CK]	R	XB n or XB+n(+···CURRENT AGC-LEVEL≥n)	
-VOICE-SCAN	XA···	w	XAnnn VOICE OFF···nnn=000	
	XA [CR]	R	XA nnn or XA+nnn(+…CURRENT VOICE-LEVEL≥n)	
-M-SCAN DELAY- Time Setting	XD	w	XDnn···nn=0.0-9.9(sec)···No need for decimal point DELAY OFF···nn=00	
	XD [CR]	R	XDn.n	
-M-SCAN PAUSE-	χр	w	XPnn···nn=00-60 (sec) ···00=PAUSE-OFF	
TIME SEFFING	XP [CR]	R	XPnn	
-START M-SCAN	MS···	w	MSn···n=0-9 or BLANK(n=BANK #)	
-START SEL-SCAN	SM···	w	SM	
-M-CH MODE	MR···	w	MRnmm···n=0-9(BANK #) mm=00-99(mm=CH #)	

-Communication parameters

()Baud rate: 4800,9600,19200 selectable

②Data bits: 8 BIT ③Stop bit: 2 BIT ④Parity check None ⑤Flow control Xon

-Change mode from REMOTE to LOCAL

①"EX"command: to LOCAL mode
②"QP"command: to POWER-OFF mode

③[ENT]key: to LOCAL mode
@[POWER]key: to POWER-OFF mode

-Change mode from LOCAL to REMOTE

AR5000 becomes REMOTE mode when either command is sent.

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	····AGC CONTROL
	····EXIT-IF ON/OFF ······
	ANT SELECT
-AS ······SEARCH······	AUTO-STORE ON/OFF(GS-CMD)
	····ATT ON/OFF ······
-AU	AUTO ON/OFF
-BN	····BANK SELECT ······
-BM ······M-SCAN ······	BANK # SETTING of LINK(GM-CMD)
-BQ ······SEARCH······	SEARCH LINK ON/OFF(GS-CMD)
-BS ······SEARCH·····	BANK # SETTING of LINK(GS-CMD)
-BW	····BW SELECT ······
-AF	AFC ON/OFF
-DM(PROM)	····LISTING PROM-DATA ······
-EN	····DE-ENPHASIS······
-EX	····EXIT(END of REMOTE) ·····
-GA ······M-SEL ······	····SELECT-CH······
-GM ······M-SCAN··· ·····	····M-SCAN GROUP #·····
-GR ······M-SEL ······	····LISTING of SELECT-CH
-GS ······SEARCH······	····SEARCH GROUP #·····
-HP	····HPF SELECT ······
-DS	····CYBER-SCAN ON/OFF ·····
-LC	····CONT.,SEND AGC-LEVEL ······
-LM	····SEND AGC-LEVEL ······
-LP	LPF SELECT
-LS	····SPE-SIG FREQ ······
-MA ···· MEM ····	····READ ALL MEMORY-DATA ·····
-MD	····MODE SETTING ·····
-ML M-SCAN	····M-SCAN LINK ON/OFF······(GM-CMD)
	····MEM PASS ON/OFF ······
	····MEM DELETE······
•	

-MR	······ MEM ····························
-MS	MEM
	WDITE MEMORY
	PELETE DACC EDEC
	CEND ALL DACC-EDED
	DACC FDEO CETTING
	ALAA FOLO MUTA ALTIMA
	DILLE ON OFF
	DELETE CEADCUIDATA
	DV EDEA SETTING
	CCND DV_DATA
	DEMOTE CO DATA
	HALF CTED EDEC
	VOICE ON OFF
	COLUMN TO THE CONTRACT OF THE
	DELAY TIME
	VOIDE ON /OFF
	CO EVEL ON/OFF(GS-CMU)(GS-CMU)
	DCI AV TIME /UOLD(GS-(MI))
	DEADOLL DATA CETTIME
	LOWER FOCO CETTING
	OCAPOUL SECOND SECTING(SE-UMD)
-SJ	SUB-STEP FREQ SETTINIG

-TM	MEMMEMORY-TEXT
	······ SEARCH······SEARCH-TEXT
-TU	
-VA	····· VFO ····· VFO-A FREQ SETTING ·····
-VB	······ VFO ·········VFO-B FREQ SETTING ·······
	······ VFO ·········VFO-C FREQ SETTING ······
-VD	····· VFO ······ VFO-D FREQ SETTING ······
-VE	······ VFO ··········VFO-E FREQ SETTING ······
-VL	BEEP-VOLUME SETTING
-VR	CPU VERSION
	······VFO ·········VFO-SEARCH START······
-XA	M-SCANVOICE ON/OFF(GM-CMD)
-XB	M-SCANSQ-LEVEL ON/OFF(GM-CMD)
-XD	M-SCANDELAY-TIME(GM-CMD)
-XM	M-SCANMODE-SCAN & ON/OFF(GM-CMD)
-XP	M-SCANPAUSE-TIME & ON/OFF(GM-CMD)
-QP	POWER OFF